

NON MAJOR ELECTIVE I

MUSHROOM CULTIVATION

Semester	Subject code	Category	Lecture		Theory		Practical		Credit
			Total hrs	Hrs/week	Total hrs	Hrs / week	Total hrs	Hrs/week	
III		Non major	30	2	30	2	0	0	2

COURSE OUTCOMES

To enable the students to understand the concepts of Mushroom cultivation and its disease control

COURSE OUTCOMES

On the successful completion of the course, students will be able to develop strong and potential skills in mushroom cultivation

CO Number	CO Statement	Knowledge Level (K1-K4)
CO1	To know about the different types of mushrooms.	K4
CO2	To understand about the cultivation of button mushrooms.	K2
CO3	To understand about the cultivation of paddy straw mushrooms.	K2
CO4	To obtain a good understanding of Mushroom cultivation and its disease control.	K4
CO5	To remember the precautions to be taken while cultivating the mushroom and the products based on mushroom.	K1

MAPPING WITH PROGRAMME OUTCOMES:

COS	PO1	PO2	PO3	PO4	PO5	PO6
CO1	S	S	M	S	M	M
CO2	S	S	M	M	M	M
CO3	S	S	S	S	M	M
CO4	S	M	S	S	S	S
CO5	S	S	S	S	S	S

S- Strong;

M- Medium;

L- Low

Unit I: Types of mushrooms

6 hrs

Edible and non – edible mushroom (Historical account, most commonly cultivated mushrooms in the world, distribution and production in various countries).

Unit II: Button Mushrooms

6 hrs

Cultivation of button mushroom – morphology raising a pure culture & spawn preparation. Preparation of compost & cultivation of *A. bisporus* Harvest.

Unit III: Paddy straw mushrooms

6 hrs

Cultivation of Oyster and Paddy straw mushroom – preparation of pure culture & spawn cultivation methods, Harvest.

Unit IV: Pests and diseases of mushrooms

6 hrs

Pests and diseases of Edible mushrooms (Environmental, Fungal, Bacterial, Viral Insect pests and Nematode diseases and Competitor moulds).

Unit V: Importance of mushroom cultivation

6 hrs

Economic Importance of mushroom cultivation. Precautions in mushroom cultivation (Precaution to be taken while selecting the area, spawn preparation,

spawn run, during cropping harvesting etc). Mushroom recipes (Western and Indian recipes, Pickles, Powders, Jams etc).

DISTRIBUTION OF MARKS: Theory - 100% and Problems – Nil

TEACHING METHODOLOGY:

- ❖ Lectures
- ❖ Power point presentation
- ❖ Charts
- ❖ Models
- ❖ Group discussion
- ❖ Group assignments

TEXT BOOKS

Sl no:	Book Name	Author	Publisher	Year of Publication
01	Handbook of Edible Mushrooms.	Kannaiyan	TNAU Publication, Coimbatore, India.	2001
02	Mushroom Culture	Alice, D., K. Muthusamy and M. Yesuraja.	Agricultural College, Research Institute Publications, Madurai, Tamil Nadu, India.	1999

REFERENCE BOOKS

Sl no :	Book Name	Author	Publisher	Year of Publication
01	Oyster Mushroom	Marimuthu , T.	Department of Plant Pathology, Tamil Nadu Agricultural University, Coimbatore.	1991

2	Handbook on Mushrooms	Nita Bhal	2 nd Edition, Volume - I and II, Oxford and IBH Publishing Co. Pvt. Ltd., New Delhi, India.	2000.
3	Mushroom Cultivation	Tripathi, D. P.	Oxford & IBH Publishing Co. Pvt. Ltd., New Delhi, India.	2017
4.	The Mushroom Handbook.	Krieger, L. C.	Sufi Press.	2015
5.	Mushroom Cultivation.	Oei, P	Backhuys Publishers ECO Consult Foundation publishers	2016

WEB REFERENCE

<https://extension.psu.edu/six-steps-to-mushroom-farming>

<https://en.wikipedia.org/wiki/Fungiculture>

<https://www.biologydiscussion.com/fungi/cultivation-of-mushrooms-2-methods/58454>

<https://homeguides.sfgate.com/mushroom-cultivation-techniques-71046.html>

<https://www.krishisewa.com/articles/production-technology/46-technology-for-mushroom-cultivation.html>

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